DOCUMENT RESUME

ED 179 730 CE 023 251

AUTHOR Gardner, David C.; Kurtz, Margaret A.

TITLE Project VITA: Graphic Arts Communication. A Picture Dictionary for Resource Room Instruction. Module I, Lessons 1-9. Teacher's Manual [and] Student Handbook.

INSTITUTION Blue Hills Regional Technical School, Canton, Mass.; Boston Univ., Mass. Dept. of Business and Career Education.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
BUREAU NO 498AH50296
PUB DATE [77]
GRANT G007500558
NOTE 92p.; For related documents see CE 023 250-257

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Computer Graphics; Curriculum Guides; *Dictionaries; *Graphic Arts; *Handicapped Students; Individualized Instruction; Learning Modules; Pictorial Stimuli; *Resource Room Programs; Secondary Education; Shop Curriculum; Special Education; Teaching Guides; *Vocabulary Development; Vocational Education
IDENTIFIERS *Phototypesetting; Project VITA

ABSTRACT

This document contains module 1 of a picture dictionary for resource room instruction. The dictionary accompanies a phototypesetting curriculum designed to provide supplemental instruction to handicapped students who are mainstreamed in a regular vocational graphic arts program. Module 1 contains nine vocabulary lessons. Each lesson provides pictorial definitions and practice exercises for five graphic arts vocabulary words. A progress check on the identification of these words is found at the end of each lesson and at the conclusion of the document. (Each volume contains both a student and teacher's manual.) (BM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED179730

BOSTON UNIVERSITY
School of Education
Department of Business and Career Education
765 Commonwealth Avenue
Boston, Massachusetts 02215

Project VITA

GRAPHIC ARTS COMMUNICATION

A Picture Dictionary for Resource Room Instruction

Module I
Lessons 1-9

Teacher's Manual

Prepared by David C. Gardner and Margaret A. Kurtz

Illustrated by Zeph Ernest

Consultants: Steven Nestor, Karen Timmerman, and Helayne VanDam

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

A collaborative project with Blue Hills Regional Technical School, Project No. 498AH 50296

This Project is supported by Grant No. 498AH 50296, U. S. Office Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

CE 023 251

Boston University policy prohibits discrimination on the basis of race, sex religion, age, color, creed, handicap, national and ethnic origin, and marital and parental status. This policy extends to all rights and privileges in the recruitment, admission, and employment of, as well as financial assistance to, students; the recruitment and employment of faculty staff; and the operation of any of the University's programs and activities. Inquiries concerning the application of or compliance with Title IX and other state and federal laws and regulations prohibiting such discrimination should be addressed to the University's Director of Affermative Action (881 Commonwealth Avenue, Boston, MA 02215) or to the Director of the United States Office for Civil Rights, or other appropriate government agency.

INTRODUCTION

This module is one of a series of two modules developed by Project VITA (Vocational Instruction, Training and Assessment), a federally funded vocational education project for students with special needs. Project VITA is a collaborative effort of the Department of Buisness and Career Education, School of Education, Boston University and The Blue Hills Regional Vocational/Technical School in Canton, Massachusetts. The purpose of each curriculum module is to provide *supplemental* vocational instruction for special needs student enrooled in a vocational program. All modules are designed for use in a resource room by special educators as *supportive* instruction for vocational shop curricula.

The vocabulary modules are designed for use with special needs students who have mild learning problems (e. g. educable mentally retarded, learning disabled, "slow learners"). The purpose of these modules is to provide supplemental instruction on an individualized or small group basis for special needs students who are enrolled in the graphic arts program. More specifically, these modules provide a series of supplementary units of instruction for developing pupil familiarity with the language of the Graphic Arts trade.

PREFACE

The Department of Labor predicts that the number of unskilled jobs will be at an all-time low during this decade and in the future. Therefore, a continued emphasis on training retarded and slow-learning students for such jobs seems futile. To train these special needs students for skilled jobs, present vocational training programs must be modified.

Modification should include:

1. Changes which emphasize development of efficient and effective vocational skill training.
2. Application of learning research to the actual training of special needs students in both integrated learning setting and learning resource rooms.

In recent years, regional vocational schools have admitted increasing numbers of special needs students to their regular programs. Many of these students experienced difficulty in mastering specific vocational skills. One of the problems was that resource teachers were trained to provide back-up instruction for *academic* programs but not for *vocational shop* programs.

One of the purposes of this series of instructional modules is to assist the resource teacher who works in a vocational school. Each module concentrates on providing supportive instruction for specific programs identified by resource and shop teachers as being in critical need of such assistance.

Assumption of Module Development

One assumption underlying the development of this series of modules is that students will concurrently receive training with regular students in the graphic arts program.

Thus, the modules are meant to provide supplemental instruction.

Presentation Plan for the Module

GRAPHIC ARTS COMMUNICATION is composed of two modules with a total of 12 lessons. Each module is independent. They are designed to integrate the work of the shop and resource teachers. The following steps are suggested for the resource teacher:

1. Ask the shop teacher to identify the words that the student needs to know.
2. Locate the modules and lesson by checking the index.
3. Give the student the Progress Chech for the lesson *before* he practices the lesson.
4. Give the student the Progess Check again *after* he practices the lesson and record the score.
5. Ask the student to repeat the lesson if he does not achieve 100 percent accuracy.
6. Give the Evaluation tests at the end of every third lesson. Record the score. If the score is poor, you may wish to ask the student to repeat the three lessons.

Each lesson has the following parts:

1. *Vocabulary Study.* Vocabulary words which are presented alphabetically in the dictionary.
2. *Vocabulary Practice.* The student is asked to use the word in a sentence and place it in his notebook.
3. *Activities.* A series of exercises using the words in the lesson.
4. *Progress Check.* An identification test to see if the student has mastered the material.

After three lessons, there is an evaluation
lessons.

Special Features of the Modules

One special feature of the modules is the picture dictionary. Students may work in the resource room with the dictionary and the other teaching aids and return to the shop to apply what they have learned.

Another feature is the set of flash cards. The students may test themselves or work with another student before they take the Progress Checks or the Evaluations.

PROJECT VITA STAFF
Phase II, 1976–77

Coordinators
David C. Gardner, Ed.D., Boston University
Ronald Linari, Ed.D., Blue Hills Regional Vocational/Technical School

Project Director
Margaret A. Kurtz, Ed.M.

University Staff
Janis Broskie
Barbara Chervin
Sheila Lonero
David Smith

Cooperating Schools
Blue Hills Regional Vocational Technical School, Albert Mlawsky, Superintendent-Director, Ronald Linari, Administrator of Special Needs
Joseph P. Keefe Technical School, Robert W. Leonard, Coordinator, Special Needs Department
Northeast Metropolitan Regional Vocational School, John Connolly, Superintendent-Director
Minuteman Regional Vocational Technical School District, Spencer Whitney, Director of Curriculum and Instruction
Whittier Regional Vocational Technical High School, George Korn, Director of Special Needs

Cooperating School Staff
Blue Hills: William Coughlin, Sidney Barnsley, Steven Nestor, Karen Timmerman
Joseph P. Keefe: Betty Anne Clark
Northeast: Louis Sardella, Louis Generazzo, June McTaggart, Karen Otazo
Minuteman: Jerry Less, Paula Barron, Richard Lee, Edward Lilles
Whittier: Chalmers Allison, Patricia Lavin

Cooperating Industrial Staff
Robert Pavin, Products Manager, Compugraphic, Inc.
Wesley Carter, Manager, Educational Materials, Compugraphic, Inc.

Consultants
Zeph Ernest
Cliff Solomon
Karen Timmerman
Steven Nestor
Helayne VanDam

PROJECT VITA STAFF
Phase I, 1975–76

Project Directors

David C. Gardner, Ed.D., Boston University
Ronald Linari, Ed.D., Blue Hills Regional Vocational/Technical School

University Staff

Louis Aikman, Ed.D.
Paula L. Gardner, Ed.M.
Donald Mikes, Ed.M.
Michelle Mika, Ed.M.
Kenneth Snowden, Ed. M.
Donald G. Stather, Ed.D.
Helayne VanDam, Ed.M.
Thomas L. Wilton, CAGS

University Graduate Assistants

Linda Unsworth, Ed.M.
Elizabeth Qamoos, Ed.M.

Project Evaluator

Norma Reali, Ph.D.

Vocational/Technical Staff

William Dwyer, M.Ed.
William Coughlin, M.Ed.
Sidney Barnsley, M.Ed.
Jerry Donovan, M.S.
Karen Timmerman, Ed.M.
Steven Nestor, CAGS
Sheila Griffin, M.A.

CONTENTS

Introduction i
Preface ii
Acknowledgments v
Table of Contents vii
Questions and Answers About the Module 1
Suggested Teacher Strategies 3
Directions for Games for Student Handbook 4
Key to Lesson 1 Game 8
Key to Progress Check 1 9
Key to Lesson 2 Game 10
Key to Progress Check 2 11
Key to Lesson 3 Game 12
Key to Progress Check 3 13
Key to Evaluation I 14
Keys to Lesson 4 Games 15
Key to Progress Check 4 17
Keys to Lesson 5 Games 18
Key to Progress Check 5 20
Keys to Lesson 6 Games 21
Key to Progress Check 6 23
Key to Evaluation II 24
Keys to Lesson 7 Games 25
Key to Progress Check 7 27
Keys to Lesson 8 Games 28
Key to Progress Check 8 30
Keys to Lesson 9 Games 31
Key to Progress Check 9 33
Key to Evaluation III 34
Index to Modules I and II 35

QUESTIONS AND ANSWERS ABOUT THE MODULE

1 What is the purpose of the Module?	1. To provide supplementary instruction in graphic arts vocabulary to students with special needs who are having difficulty understanding terms used in the shop.
2. Do these modules include all words used in graphic arts?	2. No. Only selected graphic arts vocabulary words, mostly in the composition area.
3. Can I use this module with a large group of students?	3. Ideally, no. It was constructed for use within a resource room with individualized or small group instruction. However, if a number of dictionaries are available, more students can be supervised.
4. As a resource teacher who knows very little about graphic arts, will it be possible for me to teach from this module without special training?	4. Yes. This module was constructed to facilitate its presentation by persons other than experienced graphic arts instructors.
5. How do I use this module?	5. As an aid to supplement instruction already in progress in the graphic arts class.
6. How many performance exercises requiring output proof of accuracy are there?	6. There is a Progress Check for each lesson and an Evaluation for each third lesson.
7. What materials will I need?	7. You will need to provide a notebook for the student. All other necessary materials (dictionary, flashcards, progress checks, and evaluations) are provided in the packet.
8. How will I know what materials to use?	8. The Student's Handbook outlines the materials to be used. In addition, there is a list of suggested teacher strategies in the Teacher's Manual.
9. What is the lesson pattern?	9. Each Lesson consists of four parts: 1. Vocabulary Study 2. Vocabulary Practice 3. Activities 4. Progress Check
10. How do I begin?	10. After you are familiar with the module, give the student the Student Handbook. Work with the student on Lesson 1.

11. What then?	11. The student should be able to continue without additional help from you.
12. How do I know when the student has satisfactorily learned the lesson?	12. At the end of the lesson there is a Progress Check which the student must be able to perform with 100 percent accuracy before proceeding to the next lesson.
13. What if the student is not able to complete the final objectives?	13. Return to the Teacher's Manual. Look at some of the Suggested Teacher Strategies. Have the student repeat the lesson.
14. Is there any other method of evaluation?	14. Yes. At the end of every three lessons, there is an Evaluation of all three lessons.

SUGGESTED TEACHER STRATEGIES

1. The teacher will define each vocabulary word for the student.
2. The teacher will explain to the student usage of the term as it relates to the graphic arts field.
3. The teacher will write a sentence using each vocabulary word.
4. The teacher will show the student the dictionary and how to use it.
5. The teacher will show the student the dictionary and emphasize the examples or illustrations.
6. The teacher will demonstrate the use of each term listed in the dictionary.
7. The teacher will ask the student to define the word in the lesson.
8. The teacher will ask the student to write a sentence using each word.
9. The teacher will provide the definition of the word and will ask the student whether the definition is correct or incorrect.
10. The teacher will give the student a list of words and definitions. The student will match each word with the correct definition.
11. The teacher will ask the student to match each word with the correct picture or example.
12. The teacher will ask the student to write each word and its definition in his/her own words
13. The teacher will ask the student to fill in correct words in sentences provided.

DIRECTIONS FOR GAMES

Individual Games

Missing Letter Game (Lesson 1, 2, and 3)

The words in this game are taken from the current lesson. Please have the students fill in the missing letters.

Unscramble the Letters Game (Lesson 4, 5, and 6)

All of these words are taken from the current lesson.
Ask the student to unscramble the word and write it in the space provided.

Word Search Game (Lesson 7, 8, and 9)

Ask the student to identify and circle the words hidden in the word search. When he finds it, have him cross it off the list until all the words are found.

Group Game

Know-A-Word Game (Lesson 1, 2, and 3)

Ask a student to come to the front of the room and use the blackboard for this activity. He selects a word form the current lesson. For example, if he chooses the word "*ascender*", the student would draw eight lines on the blackboard — — — — — — — —, one for each letter of the word. He will ask a student in the group to name any letter. If a student states"a", he places the "a", in its appropriate position. If a student choses the letter "t", the student at the blackboard would discard it by writing "t" on the blackboard and crossing it out. The students continue to guess letters until someone states the correct word.

Board Game (Lesson 7, 8, and 9)

Twenty words are placed around the edges of a piece of paper, and they are numbered. The student will place in a container squares of paper, with a different number on each one. He will shake them up, and pick one. If he gets the number 7, he will move his finger around the board and place it on the number 7 vocabulary word. At this time he will either define it, or use it in a sentence.

Bingo (Lesson 4, 5, and 6)

The teacher passes out the Bingo cards.

The students sit in a group. The teacher calls out a word and the student places a marker on the correct word if it is on his Bingo card. When a student gets 3 in a row or 3 diagonally left or right, he calles out Bingo.

GAMES FOR SUPPLEMENTAL INSTRUCTION

The following games are suggested for Parts 2 and 3 of the Activities section of each lesson in the *Student's Handbook*.

Lesson	Individual Games	Group Games
1	Missing Letters	Know-A-Word
2	Missing Letters	Know-A-Word
3	Missing Letters	Know-A-Word
4	Unscramble the Words	Bingo
5	Unscramble the Words	Bingo
6	Unscramble the Words	Bingo
7	Word Search	Board Game
8	Word Search	Board Game
9	Word Search	Board Game

KNOW-A-WORD

Group Game

MODULE I: LESSONS 1-3
MODULE II: LESSON 10

See directions in Teacher's Handbook.

The students can select words from the following lists:

Lesson 1

ampersand
ascender
asterisk
body type
bold face

Lesson 2

brayer
classification of type
cold type
composing stick
composition

Lesson 3

compositor
computerized composition
copy
dead
descender

Lesson 10

comprehensive
cropping
dummy
indention
layout

KEY
MISSING LETTER
Individual Game
MODULE I: LESSON 1

Directions: Fill in the missing letters in the words below.

1. a m *p* e r s a *n* d

2. b o *d* y *t* y p *e*

3. a s t e *r* i *s* k

4. b *o* l d *f* a c *e*

5. *a* s c e *n* d *e* r

KEY

PROGRESS CHECK 1

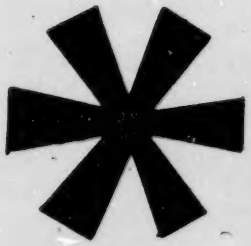
Directions: 1. Look at each picture carefully.
2. Write the word or words for each picture on the line below it.

Bold face

Vs

Regular type

bold face



asterisk

b,d,f,h,k,l, and t.

ascender

body type

ampersand

KEY
Individual Game
MODULE I: LESSON 2

Directions: Fill in the missing letters in the words below.

1. b r *a* *y* e r

2. c o *m* p o *s* i n g s *t* i c *k*

3. *c* o l *d* t *y* p *e*

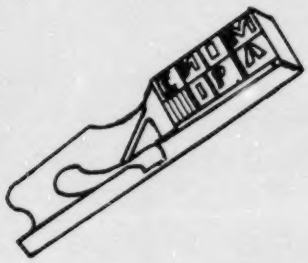
4. c o *m* *p* o s *i* *t* i o *n*

5. *c* l a s s *i* f i *c* a t i *o* *n*
o f *t* y p *e*

KEY

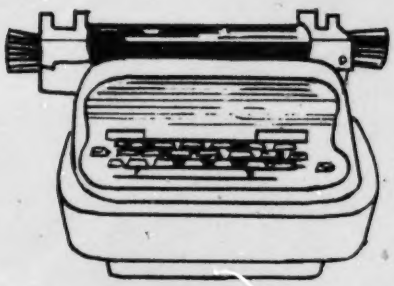
PROGRESS CHECK 2

Directions: 1. Look at each picture carefully.
2. Write the word or words for each picture on the line below it.

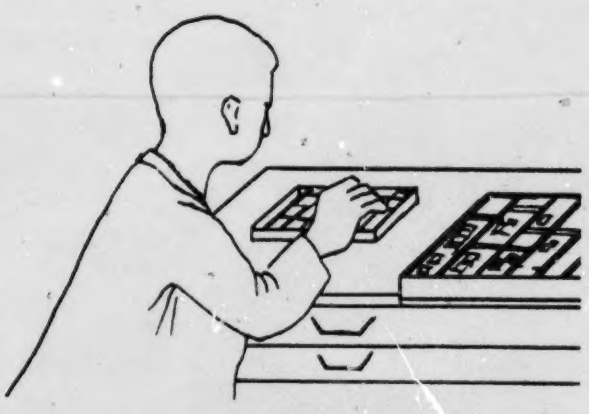


composing stick

classification of type



cold type



composition

brayer

KEY
MISSING LETTER
Individual Game

MODULE I: LESSON 3

Directions: Fill in the missing letters in the word below.

1. *c* o m *p* o s *i* t *o* r

2. c *o* p *y*

3. *d* e s *c* e n d e *r*

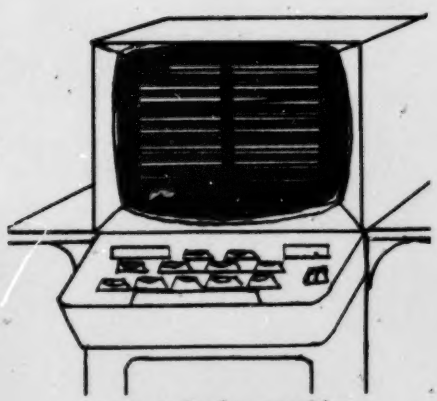
4. *c* o m *p* u *t* e r i *z* e d
   c o m *p* *o* s i t *i* o n

5. *d* e *a* d

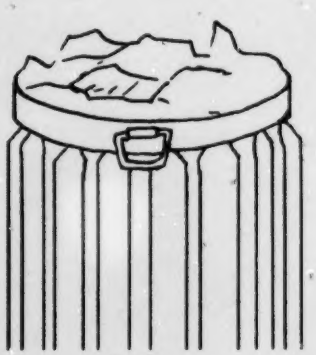
Progress Check 3

Direction: 1. Look at each picture carefully.
2. Write the word or words for each picture on the line below it.

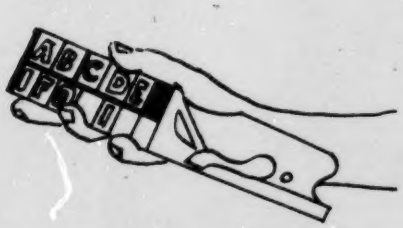
copy



computerized composition



dead



compositor

g, j, p, q,

and y.

descender

Student _____

Date _____

KEY
EVALUATION I

Directions:
1. **Look at the definition in Column I.**
2. **Find the correct word in Column II.**
3. **Fill in the correct letter in the blank space.**

Column I	Column II
1. The Part of the letter that rises above the body of the letter and reaches the top of the line is called **b.**	a. ampersand
2. Type that is much heavier and darker than regular type is called **e**	b. ascender
3. A symbol that looks like a star and is a reminder to look in another place for more information is called a **c.**	c. asterisk
4. A roller for inking type which is similar to a paint roller is called a **f.**	d. body type
5. Type you get when you set by direct impression is called **h.**	e. bold face
6. The setting of type by hand or machine for printing of copy is called **j.**	f. brayer
7. The symbol for and is called **a.**	g. classification of type
8. A person who sets type for printing is called **k.**	h. cold type
9. The part of the letter that falls below the body of the letter is called **o.**	i. composing stick
10. Type that refers to the main section in newspaper columns, book pages, and general reading material is called **d.**	j. composition
11. Material given to the printer to set that also includes photographs and art work is called **m.**	k. compositor
12. Type that is grouped for easy reference is called **g.**	l. computorized composition
13. A printed page that has been printed but will not be printed again is **n.**	m. copy
14. A hand held tool used to set type is called **i.**	n. dead
15. Type set by a computer is called **l.**	o. descender

KEY

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 4

Directions:
1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. em	em
2. tpye yapldis	display type
3. shulf ftel	flush left
4. en	en
5. aymfil	family

display type

flush left

family

em

en

BINGO

Group Game

MODULE: I LESSON 4

Directions: Your teacher will give you instructions.

display type	em	compositor
copy	en	descender
cold type	family	flush left

Name _____

Date _____

KEY

PROGRESS CHECK 4

Directions: **1. Look at the definitions in Column I.**
2. Fill in the missing word or words from Column II.

Column I	Column II
1. *Flush left* means that type has been set to line up on the left margin.	display type
2. *Display type* describes the type used for headings and sub-headings. *Display type* is larger than body (text) type.	em
3. *Em* is a space or a letter as wide as the letter M. It is used as a unit of measure by printers.	en
4. *Family* refers to variations of same basic type face design.	family
5. *En* is a space or a letter as wide as the letter N. It is used as a unit of measure by printers	flush left

KEY

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 5

Directions:
1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. ghrti shufl	flush right
2. ntof	font
3. raih neli	hair line
4. tpeytoh	hot type
5. liofo	folio

---

flush right

folio

font

hair line

hot type

BINGO

Group Game

MODULE: I LESSON 5

Directions: Your teacher will give you instructions.

flush right	hot type	hairline
flush left	folio	en
font	family	em

Name _____

Date _____

KEY

PROGRESS CHECK 5

Directions: 1. Look at the definitions in Column I.
2. Fill in the missing word or words from Column II.

Column I	Column II
1. *Font* is a group of letters and symbols. The printing type is of one size and style but has the same basic type face.	flush right
2. *Flush right* is that type has been set to line up on the right margin.	folio
3. *Hot type* refers to type which is made from hot or molten metal. It can be set by hand or by machine.	font
4. *Folio* refers to the page number.	hairline
5. *Hairline* is the thinnest line on the face of the type.	hot type

KEY

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 6

Directions:
1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. ealdgin	leading
2. tteelrspingac	letter spacing
3. tificajustion	justification
4. brdoayek	keyboard
5. galiture	ligature

---

justification

keyboard

leading

letterspacing

ligature

BINGO

Group Game

MODULE I: LESSON 6

Directions: Your teacher will give you instructions.

justification	ligature	font
keyboard	folio	leading
hot type	letterspacing	hairline

Name _____

Date _____

KEY

PROGRESS CHECK 6

Directions: 1. Look at the definitions in Column I.

2. Fill in the missing word or words from Column II.

Column I	Column II
1. *Letterspacing* is the amount of extra space between letters added to help justify a line.	justification
2. *Keyboard* has rows of keys like those on a typewriter. The operator sits in front of the keyboard and pushes down keys to print letters, numbers, punctuation marks, and other character symbols. There are also keys to perform different functions.	keyboard
3. *Ligature* is two or more letters that are joined. These letters are connected on the same body.	leading
4. *Justification* is spacing a line of type so that it is exactly even on both left and right margins.	letterspacing
5. *Leading* may be single-leaded (2 points), double-leaded (4 points), or triple-leaded (6 points). Then used without a numbered before it, it always means 2-point lead.	ligature

Student_____

Date_____

KEY
EVALUATION II

Directions:
1. **Look at the definition in Column I.**
2. **Find the correct word in Column II.**
3. **Fill in the correct letter in the blank space.**

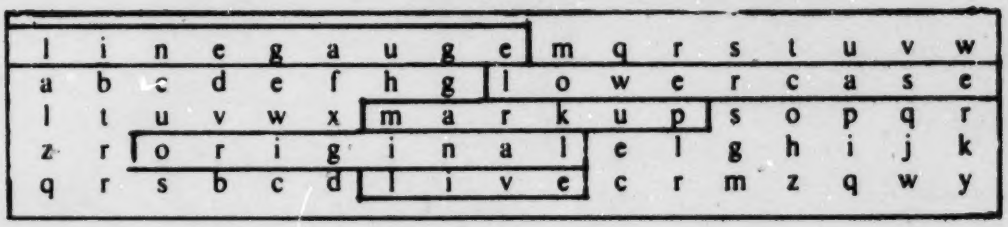
Column I	Column II
1. A space or letter as wide as the letter M is called **b.**	a. display type
2. Type that has been set line up on the left margin is called **e**	b. em
3. A space or letter as wide as the letter n is called **c.**	c. en
4. Type that has been set to line up on the right margin is called **f.**	d. family
5. A group of letters and symbols is called **h.**	e. flush left
6. A type that is made from hot or molten metal is called **j.**	f. flush right
7. Type that is used for heading and sub-headings is called **a.**	g. folio
8. Spacing a line of type so that it is exactly even on both left and right margins is called **k.**	h. font
9. When two or more letters are joined they are called **o.**	j. hot type
10. Variations of the same basic type face design is called **d.**	i. hairline
11. Single leaded (2 points), double-leaded (4 points) or triple-leaded (6 points) is called **m.**	k. justification
12. A page number is called **g.**	l. keyboard
13. The amount of extra space betwen letters added to help justify a line is called **n.**	m. leading
14. The thinnest line on the face of type is called **i.**	n. letterspacing
15. Rows of keys like those on a typewriter are called **l.**	o. ligature

WORD SEARCH

Individual Game

MODULE I: LESSON 7

Directions:
1. Look at the words at the bottom of the page.
2. Find each word in the box.
3. Circle each word you find.
4. Check off each word on the list as you find it.



l	i	n	e	g	a	u	g	e	m	q	r	s	t	u	v	w
a	b	c	d	e	f	h	g	l	o	w	e	r	c	a	s	e
l	t	u	v	w	x	m	a	r	k	u	p	s	o	p	q	r
z	r	o	r	i	g	i	n	a	l	e	l	g	h	i	j	k
q	r	s	b	c	d	l	i	v	e	c	r	m	z	q	w	y

line gauge

live

lower case

mark up

original

BOARD GAME

Group Game

MODULE I: LESSON 7

Directions: Your teacher will give you instructions.

line gauge (1)	live (12)	lower case (11)	justification (10)
mark-up (2)			folio (9)
original (3)			font (8)
keyboard (4)	letterspacing (5)	hot type (6)	family (7)

Name _____

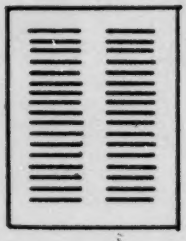
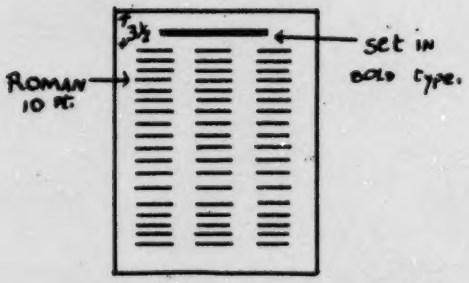
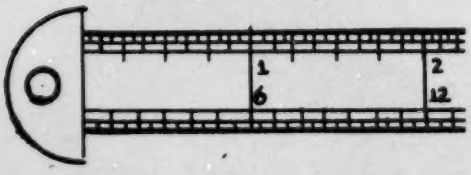
Date _____

Key

PROGRESS CHECK 7

Directions:

1. Read each term in Column I.
2. Draw a line from the term to the correct picture in Column II.
3. Read each definition in Column III.
4. Draw a line from the definition to the correct picture in Column II.

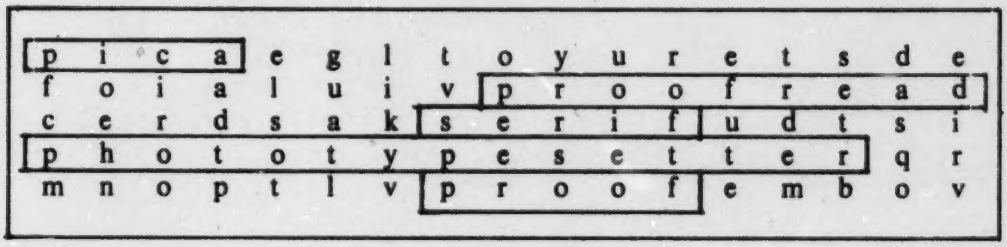
Column I	Column II	Column III
line gauge		To write instructions for the printer. These instructions, written on a layout, include width and depth of a page, style and size of type, size of illustration, and any other specific instructions that may apply.
live		Refers to a "form" that is ready for printing. It also can be material that has been printed and is saved for further use.
lower case		Refers to a special ruler or measuring device that printers use. It is usually one foot long, marked on one side with inches and on the other with points.
mark up		Refers to the copy prepared by the customer. The final printing is made from the original.
original		Letters which are not capital letters.

WORD SEARCH

Individual Game

MOULE I: LESSON 8

Directions:
1. Look at the words at the bottom of the page.
2. Find each word in the box.
3. Circle each word you find.
4. Check off each word on the list as you find it.



pica

proofread

phototypesetter

proof

serif

BOARD GAME

Group Game

MODULE I: LESSON 8

Directions: Your teacher will give you instructions.

proof (1)	live (12)	proofreading (11)	mark up (10)
lower case (2)			ligature (9)
line gauge (3)			phototypesetter (8)
original (4)	pica (5)	serif (6)	font (7)

Name _____

Date _____

KEY

PROGRESS CHECK 8

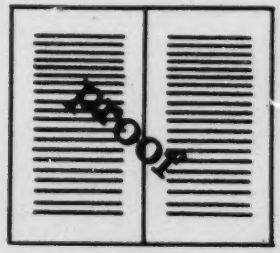
Directions:

1. Read each term in Column I.
2. Draw a line from the term to the correct picture in Column II.
3. Read each definition in Column III.
4. Draw a line from the definition to the correct picture in Column II.

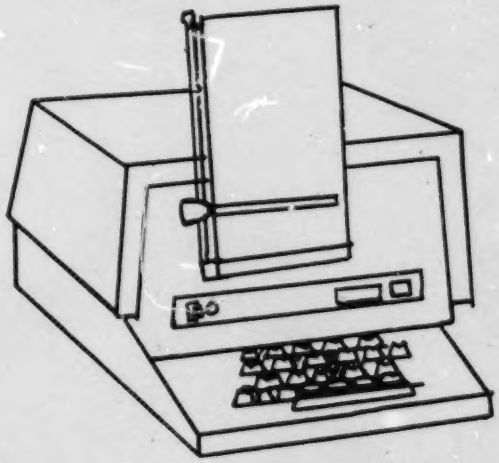
Column I

phototypesetter

proof

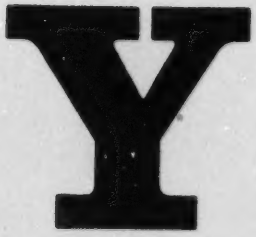


proofreading



pica

serif



Column III

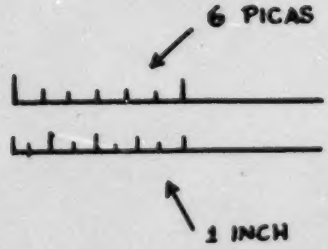
The short cross-line or finishing stroke which extends beyond the normal width of the type face.

A machine that sets type by taking pictures. After the type has been set, the photographed material is fed into a developing unit which makes a film negative.

Reading over the printed sample to see if there are any errors before final printing.

A printing sample of the original copy.

A printer's basic unit of measure. It is equal to 1..6 of an inch.



BOARD GAME

Group Game
MODULE I: LESSON 9

Directions: Your teacher will give you instructions.

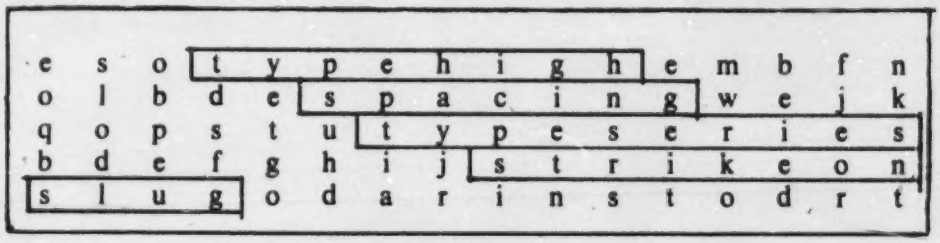
slug (1)	type series (12)	pica (11)	serif (10)
mark up (2)			original (9)
strike one (3)			live (8)
type high (4)	spacing (5)	lower case (6)	keyboard (7)

WORD SEARCH

Individual Game

MODULE I: LESSON 9

Directions:
1. Look at the words at the bottom of the page.
2. Find each word in the box.
3. Circle each word you find.
4. Check off each word on the list as you find it.



type high

spacing

typeseries

strike on

slug

42

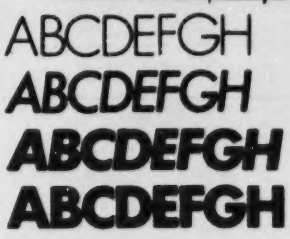
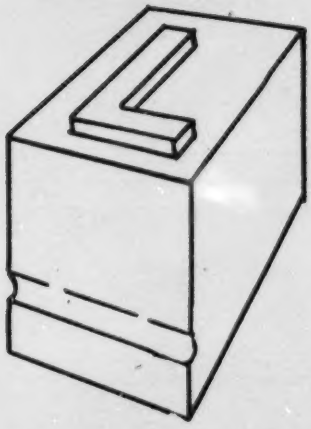
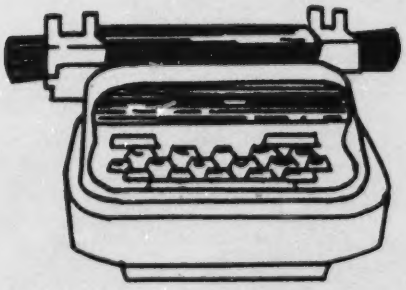
Name _____

Date _____

KEY

PROGRESS CHECK 9

Directions:
1. Read each term in column I.
2. Draw a line from the term to the correct picture in Column II.
3. Read each definition in Column III.
4. Draw a line from the definition to the correct picture in Column II.

Column I	Column II	Column III
slug		Setting the print evenly.
spacing		Type set by a direct impression method or set on a typewriter composing machine.It is also known as cold type.
strike on		It is the same type face design, but it is different point sizes.
type high		It refers to the standard height of 0.918 inch for all type in the United States. It is measured from the face to the feet of type. This standard height makes it easier to adjust the pressure on various parts of a letterpress form.
type series		A strip of metal, 6 points or more, used for spacing between lines of type.

Student _____

Date _____

KEY
EVALUATION III

Directions:
1. **Look at the definition in Column I.**
2. **Find the correct word in Column II.**
3. **Fill in the correct letter in the blank space.**

Column I	Column II
1. A form that is ready for printing is called **b.**	a. line gauge
2. Copy that is prepared by the customer is called **e**	b. live
3. Letters which are not capital letters are called **c**	c. lower case
4. A machine that sets type by taking pictures is called **f**	d. mark up
5. To read over the printed sample to see if there are any errors before final printing is called **h**	e. original
6. A short cross-line of finishing stroke which extends beyond the normal width of the type face is called **j**	f. phototypesetter
7. A strip of metal, 6 points of more, used for spacing between lines of type is called **k**	g. proof
8. The same type face design but with different point sizes is called **o**	h. proofreading
9. When one writes instructions for the printer, it is called **d**	i. pica
10. Compostion type set by a direct-impression method or set on a typewriter composing machine is called **m**	j. serif
11. A printed sample of the original copy is called **g**	k. slug
12. Standard height of 0.918 inches for all type in the United States is called **n**	l. spacing
13. The printer's basic unit of measure is called **i**	m. strike on
14. Setting the print evenly is called **l**	n. type high
15. A special ruler or measuring device that printers use is called **a**	o. type series

INDEX TO MODULES I-II

ampersand	I	1
ascender	I	1
asterisk	I	1
body type	I	1
bold face	I	1
brayer	I	2
classification of type	I	2
cold type	I	2
composing stick	I	2
composition	I	2
comprehensive	II	10
compositor	I	3
computerized composition	I	3
copy	I	3
cropping	II	10
dead	I	3
descender	I	3
display type	I	4
dummy	II	10
em	I	4
en	I	4
family	I	4
flush left	I	4
flush right	I	5
folio	I	5
font	I	5
hairline	I	5
hot type	I	5
indention	II	10
justification	I	6
keyboard	I	6
layout	II	10
leading	I	6
letterspacing	I	6
ligature	I	6
line gauge	I	7
live	I	7
lower case	I	7
margins	II	10

mark up	I	7
opaquing	II	11
original	I	7
overlay	II	11
paste up	II	11
phototypesetter	I	8
proof	I	8
proofreading	I	8
pica	I	8
register marks	II	11
reverse	II	11
rough layout	II	12
serif	I	8
slug	I	9
spacing	I	9
strike on	I	9
thumbnail sketch	II	12
type high	I	9
type series	I	9
type size	II	12
upper case	II	12

BOSTON UNIVERSITY
School of Education
Department of Business and Career Education
765 Commonwealth Avenue
Boston, Massachusetts 02215

Project VITA

GRAPHIC ARTS COMMUNICATION

A Picture Dictionary for Resource Room Instruction

Module I
Lessons 1-9

Student Handbook

Prepared by David C. Gardner and Margaret A. Kurtz

Illustrated by Zeph Ernest

Consultants: Steven Nestor, Karen Timmerman, and Helayne VanDam

A collaborative project with Blue Hills Regional Technical School, P[illegible]t No. 498AH50296

This Project is supported by Grant No. 498AH50296, U. S. Office Education, [illegible]artment of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect th[illegible]sition or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Educatio[illegible]should be inferred.

FOREWORD TO THE STUDENT

INTRODUCTION

GRAPHIC ARTS VOCABULARY is a new book. It is divided into two sections. Each section is called a module. The modules will help you to understand the graphic arts vocabulary that is used in the shop.

You should use this module in the resource room. You should be receiving training in graphic arts in the shop.

LESSON PLAN

There are twelve lessons in the two modules. Each lesson introduces you to five graphic arts vocabulary words.

This is the lesson plan:

1. *Vocabulary Study.* Five words which are presented in the graphic arts dictionary.
2. *Vocabulary Practice.* Exercises using the vocabulary word in a sentence.
3. *Activities.* Exercises using the words by activities and games.
4. *Progress Check.* An identification of the words in the lesson. At the end of each module, there is an Evaluation.

SPECIAL FEATURES

The special feature of this module is the picture dictionary. You will be able to see the word, its definition, and an example or illustration at the same time. The flash cards will help you reinforce what you learn in each lesson.

You will be asked to prepare a notebook. The notebook will include definitions, sentences, and examples of words used in the module.

Project VITA Staff
Phase II, 1976 - 77

COORDINATORS

David C. Gardner, Ed.D., Boston University
Ronald Linari, Ed.D., Blue Hills Regional Vocational/Technical School

PROJECT DIRECTOR

Margaret A. Kurtz, Ed.M.

COORDINATOR OF ASSESSMENT AND EVALUATION

Sue Allen Warren, Ph.D.

UNIVERSITY STAFF

Janis Broskie
Barbara Chervin
Sheila Lonero
David Smith

COOPERATING SCHOOLS

Blue Hills Regional Vocational Technical School, Albert Mlawsky, Superintendent - Director, Ronald Linari, Administrator of Special Needs
Joseph P. Keefe Technical School, Robert W. Leonard, Coordinator, Special Needs Department
Northeast Metropolitan Regional Vocational School, John Connolly, Superintendent-Director
Minuteman Regional Vocational Technical School District, Spencer Whitney, Director of Curriculum and Instruction
Whittier Regional Vocational Technical High School, George Korn, Director of Special Needs

COOPERATING SCHOOL STAFF

Blue Hills: William Coughlan, Sidney Barnsley, Steven Nestor, Karen Timmerman
Joseph P. Keefe: Betty Anne Clark
Northeast: Louis Sardella, Louis Generazzo, June McTaggart, Karen Otazo
Minuteman: Jerry Less, Paula Barron, Richard Lee, Edward Lilles
Whittier: Chalmers Allison, Patricia Lavin

COOPERATING INDUSTRIAL STAFF

Robert Pavin, Products Manager, Compugraphic, Inc.
Wesley Carter, Manager, Educational Materials, Compugraphic, Inc.

CONSULTANTS

Zeph Ernest
Cliff Solomon
Karen Timmerman
Steven Nestor
Helayne VanDam

Project VITA Staff
Phase I, 1975 - 76

PROJECT DIRECTORS

David C. Gardner, Ed.D., Boston University
Ronald Linari, Ed.D., Blue Hills Regional Vocational/Technical School

UNIVERSITY STAFF

Louis Aikman, Ed.D.
Paula L. Gardner, Ed.M.
Donald Mikes, Ed.M.
Michelle Mika, Ed.M.
Kenneth Snowden,
Donald G. Stather, Ed.D.
Helayne VanDam, Ed.M.
Thomas L. Wilton, CAGS

UNIVERSITY GRADUATE ASSISTANTS

Linda Unsworth, Ed.M.
Elizabeth Qamoos, Ed.M.

PROJECT EVALUATOR

Norma Reali, Ph.D.

VOCATIONAL/TECHNICAL STAFF

William Dwyer, M.Ed.
William Coughlan, M.Ed.
Sidney Barnsley, M.Ed.
Jerry Donovan, M.S.
Karen Timmerman, Ed.M.
Steven Nestor, CAGS
Sheila Griffin, M.A.

CONTENTS

Project VITA Staff, Phase II ii
Project VITA Staff, Phase I iii
Forward to the student v
Introduction to Phototypesetting vi
Lesson 1 1
Lesson 2 3
Lesson 3 5
Lesson 4 7
Lesson 5 10
Lesson 6 13
Lesson 7 16
Lesson 8 19
Lesson 9 22
Graphic Arts Dictionary 25
Index to Module I and II 41

MODULE I: LESSON 1

Vocabulary Study and Practice

1. Find the following words in your graphics arts dictionary. Study each word, its meaning, and the picture or example.
   a. ascender
   b. asterisk
   c. ampersand
   d. body type
   e. bold face
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

Activities

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Complete the " Missing Letter " Game on page 2.
3. Group Game. Ask your teacher for the group game for Lesson 1.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 1.

MISSING LETTER

Individual Game

MODULE I: LESSON 1

Directions: Fill in the missing letters in the words below.

1. ___m___ e r s a ___d

2. b o___y___ y p ___

3. a s t e ___ i ___ k

4. b ___l d ___a c ___

5. ___ s c e ___ d ___ r

MODULE I: LESSON 2

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. brayer
   b. classification of type
   c. cold type
   d. composing stick
   e. composition
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Complete the "Missing Letter" game on page 4.
3. Group Game. Ask your teacher for the group game for Lesson 1.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 2.

MISSING LETTER

Individual Game

MODULE I: LESSON 2

Directions: Fill in the missing letters in the words below.

1. b r ___ ___ e r

2. ___ o ___ p o ___ i ___ g
   s ___ i c ___

3. ___ o l ___ t ___ p ___

4. c o _____ o s _____ i o

5. ___ l a s s ___ f i ___ ___ t i ___
   ___ f ___ y p ___

MODULE I: LESSON 3

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. compositor
   b. computerized composition
   c. copy
   d. dead
   e. descender
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Complete the "Missing Letter" game on page 6.
3. Group Game. Ask your teacher for the group game for Lesson 1.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 3.

MISSING LETTER

Individual Game

MODULE I: LESSON 3

Directions: Fill in the missing letters in the words below.

1. ___ o m ___ o s ___ t ___ r

2. c ___ p ___

3. ___ e s ___ e n d e ___

4. ___ o m ___ u ___ e ___ i ___ e d
   ___ o m ___ ___ s i t ___ o n

5. ___ e ___ d

MODULE I: LESSON 4

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. display type
   b. em
   c. en
   d. family
   e. flush left
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into you notebook.
2. Individual Game. Your individual game in on page 8.
3. Group Game. Your group game is on page 9.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 4.

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 4

Directions:
1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. em	_____
2. tpye yapldis	_____
3. shulf ftel	_____
4. en	_____
5. aymfil	_____

display type

flush left

family

em

en

BINGO

Group Game

MODULE I: LESSON 4

Directions: Your teacher will give you instructions.

em	compositor	display type
en	descender	copy
family	flush right	cold type

MODULE I: LESSON 5

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. flush right
   b. folio
   c. font
   d. hairline
   e. hot type
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Your individual game is on page 11.
3. Group Game. Your group game is on page 12.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 5.

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 5

Directions:
1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. ghtri, shulf	_____
2. ntof	_____
3. raihneli	_____
4. tpey toh	_____
5. liofo	_____

flush right

folio

font

hairline

hot type

BINGO

Group Game

MODULE I: LESSON 5

Directions: Your teacher will give you instructions.

flush right	hot type	hairline
flush left	folio	en
font	family	em

MODULE I: LESSON 6

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. justification
   b. keyboard
   c. leading
   d. letterspacing
   e. ligature
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Your group game is on page 15.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 6.

UNSCRAMBLE THE WORDS

Individual Game

MODULE I: LESSON 6

Directions 1. Look at the scrambled words in Column 1.
2. Write the correct words they represent in Column 2.
3. Refer to the words below the line, if you need help.

COLUMN 1	COLUMN 2
1. ealdgin	_____
2. spcngia lteter	_____
3. tificajustion	_____
4. brdoayek	_____
5. galiture	_____

justification

keyboard

leading

letterspacing

ligature

BINGO

Group Game

MODULE I: LESSON 6

Directions: Your teacher will give you instructions.

justification	ligature	font
keyboard	folio	leading
hot type	letterspacing	hairline

MODULE I: LESSON 7

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. line gauge
   b. live
   c. lower case
   d. mark up
   e. original
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Your individual game is on page 18.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 7.

WORD SEARCH

Individual Game

MODULE I: LESSON 7

Directions:
1. Look at the word below the line.
2. Find each word in the box above the line.
3. Circle each word you find.
4. Check off each word below the line as you find it.

l i n e g a u m q r s t u v w
a c c d e f h g l o w e r c a s e
l t u v w x m a r k u p s o p q z r
o r i g i n a l e l g h i j k
q r s b c d l i v e c r m z q w y

line gauge
live
lower
case
mark up
original

BOARD GAME

Group Game

MODULE I: LESSON 7

Directions: Your teacher will give you instructions.

line gauge (1)	live (12)	lower case (11)	justification (10)
mark up (2)			folio (9)
original (3)			font (8)
keyboard (4)	letterspacing (5)	hot type (6)	family (7)

MODULE I: LESSON 8

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. phototypesetter
   b. proof
   c. proofreading
   d. pica
   e. serif
2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Your individual game is on page 20.
3. Group Game. Your group game is on page 21.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 8.

WORD SEARCH

Individual Game

MODULE I: LESSON 8

Directions:
1. Look at the words at the bottom of the page.
2. Find each word in the box.
3. Circle each word you find.
4. Check off each word at the bottom of the page as you find it.

p	i	c	a	e	g	l	t	o	y	u	r	e	t	s	d	e	i	e	k	d
f	o	i	a	l	u	i	v	p	r	o	o	f	r	e	a	d	i	n	g	c
c	e	r	d	s	a	k	s	e	r	i	f	u	d	t	s	i	n	u	i	o
p	h	o	t	o	t	y	p	e	s	e	t	t	e	r	q	r	s	t	u	v
m	n	o	p	t	l	v	p	r	o	o	f	e	m	b	o	v	a	i	f	n

pica
proofreading
phototypesetter
proof
serif

BOARD GAME

Group Game

MODULE I: LESSON 8

Directions: Your teacher will give you instructions.

proof (1)	live (12)	proofreading (11)	mark up
lower case (2)			ligature (9)
line gauge (3)			phototypesetter (8)
original (4)	pica (5)	serif (6)	font (7)

MODULE I: LESSON 9

VOCABULARY STUDY AND PRACTICE

1. Find the following words in your graphic arts dictionary. Study each word, its meaning, and the picture or example.
   a. slug
   b. spacing
   c. strike on
   d. type high
   e. type series

2. Use each word in a sentence. Write the sentence in your notebook.
3. Write a paragraph using as many of the vocabulary words as possible.
4. Write the paragraph in your notebook.

ACTIVITIES

1. Find an example or picture of the vocabulary words from printed articles in newspapers or magazines. Where possible, try to find an example of how the word is used in printing. Put your examples into your notebook.
2. Individual Game. Your individual game is on page 23.
3. Group Game. Your group game is on page 24.

PROGRESS CHECK

Tell your teacher that you are ready for Progress Check 9.

WORD SEARCH

Individual Game

MODULE 1: LESSON 9

Directions:
1. Look at the words at the bottom of the page.
2. Find each word in the box.
3. Circle each word you find.
4. Check off each word at the bottom of the page as you find it.

e	s	o	t	y	p	e	h	i	g	h	e	m	b	f	n
o	l	b	d	e	s	p	a	c	i	n	g	w	e	j	k
q	o	p	s	t	u	t	y	p	e	s	e	r	i	e	s
b	d	e	f	g	h	i	j	s	t	r	i	k	e	o	n
s	l	u	g	o	d	a	r	i	n	s	t	o	d	r	t

type high
spacing
typeseries
strike on
slug

BOARD GAME

Group Game

MODULE I: LESSON 9

Directions: Your teacher will give you instructions.

slug (1)	type series (12)	pica (11)	serif (10)
mark up (2)			original (9)
strike one (3)			live (8)
type high (4)	spacing (5)	lower case (6)	keyboard (7)

ampersand (am per sand)

The ampersand is the symbol for "and".

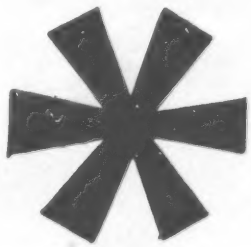
ascender (as cend er)

The ascender is that part of the letter that rises above the body of the letter and reaches the top of the line.
Letters with ascenders are:
b, d, f, h, k, l, and t.

b,d,f,h,k,l, and t.

asterisk (as' ter isk)

An asterisk looks like a star, (*), and is a reminder to look in another place for more information.



body type

Body type is also called text type.
It refers to the main section in newspaper column, book pages, and general reading material.

bold face

Bold face is type that is much heavier and darker than regular type. It is used to call attention to important words or phrases.

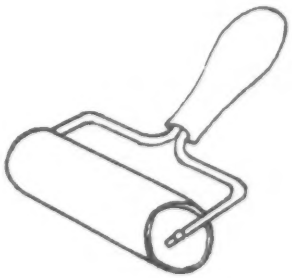
Bold face

Vs

Regular type

brayer (bray er)

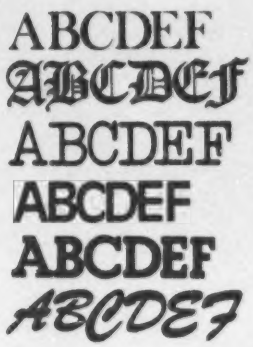
A brayer is a roller for inking type. It is similar to a paint roller.



classification of type

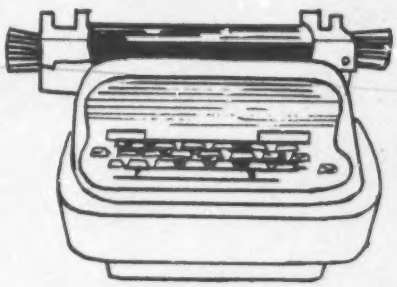
(class i fi ca tion)

Type may be grouped for easy reference. The type is classified by its face, or the way it looks.



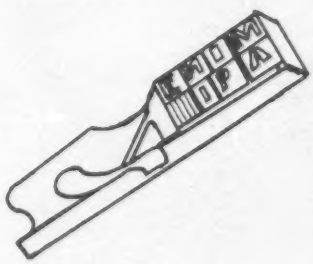
cold type

Cold type refers to the type you get when you set the type by direct impression. It is also the type you get from phototypesetting.



composing stick

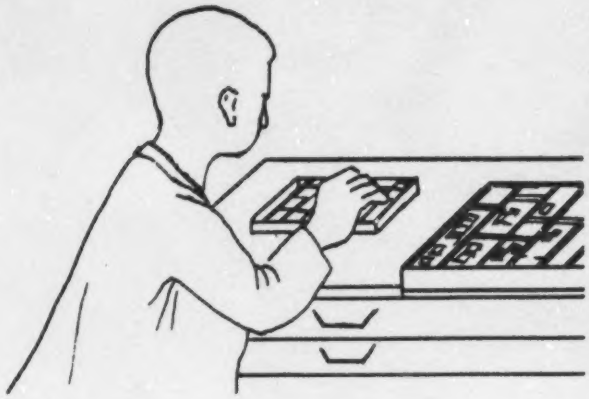
A composing stick is a hand-held tool used to set type.



78

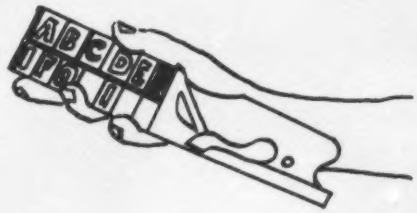
composition **(com po si tion)**

Composition is the setting of type by hand or machine for printing of the copy.



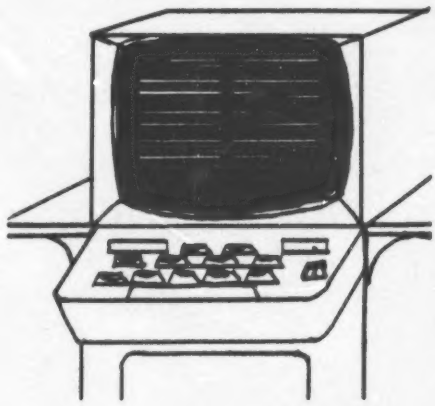
compositor **(com pos it or)**

A compositor is a person who sets type for printing. He may set it by hand or by machine.



computerized composition
(com put er ized com po si tion)

Computerized composition refers to type set by a computer. The computer corrects and justifies lines at very high speeds. It makes up to 1,000 characters per second.

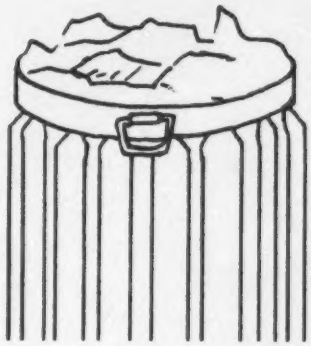


copy

Copy is material given to the printer to set. It can also include photographs and artwork.

dead

Dead refers to a printed page that has been printed but will not be printed again.



descender (de scend er)

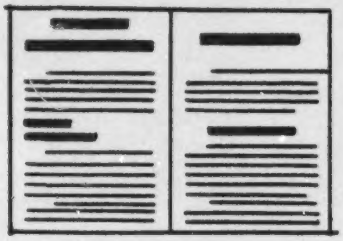
The descender is that part of the letter that falls below the body of the letter. It also falls under the line.

Letters with descenders are g, j, p, q, and y.

g, j, p, q, and y.

display type

Display type describes the type used for headings and sub-headings. Display type is larger than body (text) type.



em

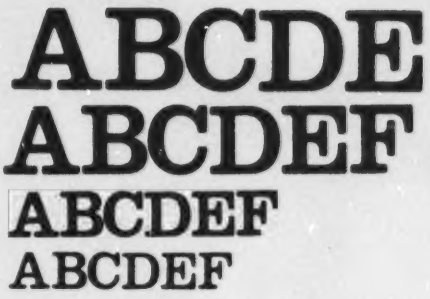
Em is a space or a letter as wide as the letter M. It is used as a unit of measure by printers.

en

The en is a space or a letter as wide as the letter n. It is used as a unit of measure by printers.

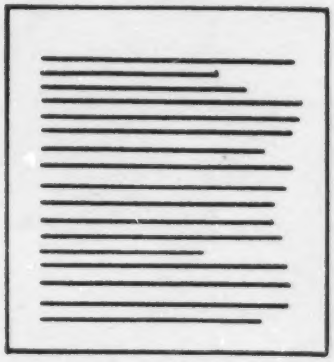
family (fam i ly)

Family refers to variations of the same basic type face design.



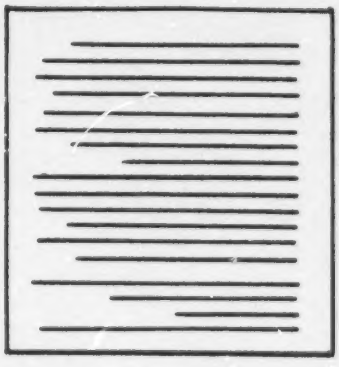
flush left

Flush left means that type has been set to line up on the left margin.



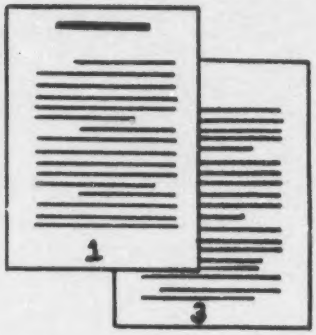
flush right

Flush right means that type has been set to line up on the right margin.



folio **(fo li o)**

Folio refers to the page number.



font

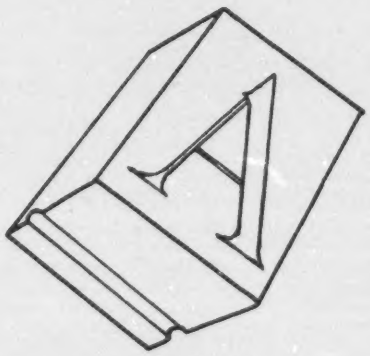
A font is a group of letters and symbols. The printing type is of one size and style but has the same basic type face.

a,b,c,d...

1,2,3...

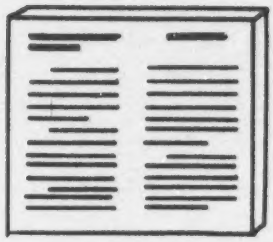
hairline **(hair line)**

A hairline is the thinnest line on the face of type.



hot type

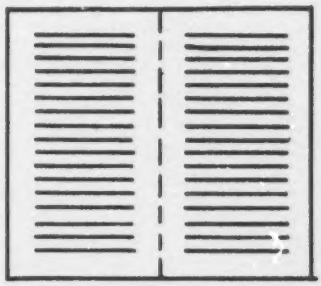
Hot type refers to type which is made from hot or molten metal. It can be set by hand or machine.



Hot type plate

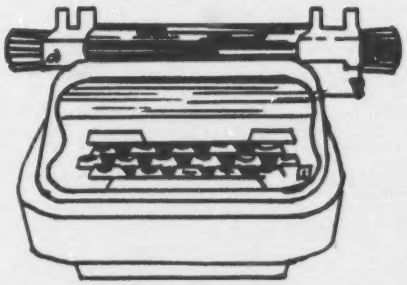
justification (jus ti fi ca tion)

Justification is spacing a line of type so that it is exactly even on both left and right margins.



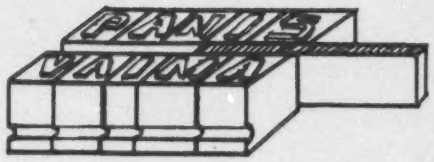
keyboard (key board)

The keyboard has rows of keys like those in a typewriter. The operator sits in front of the keyboard and pushes down keys to print letters, numbers, punctuation marks, and other character symbols. There are also keys to perform different functions.



leading

Leading may be single-leaded (2 points), double-leaded (4 points), or triple-leaded (6 points). When leading is used without a number before it, it always means 2-point lead



letterspacing (let ter spac ing)

Letterspacing is the amount of extra space between letters added to help justify a line.

Extra space

ligature (lig a ture)

A ligature is two or more letters that are joined. These letters are connected on the same body. The five common ligatures are fi, ff, fl, ffi, ffl.

ff, fl, fi, ffl, ffi.

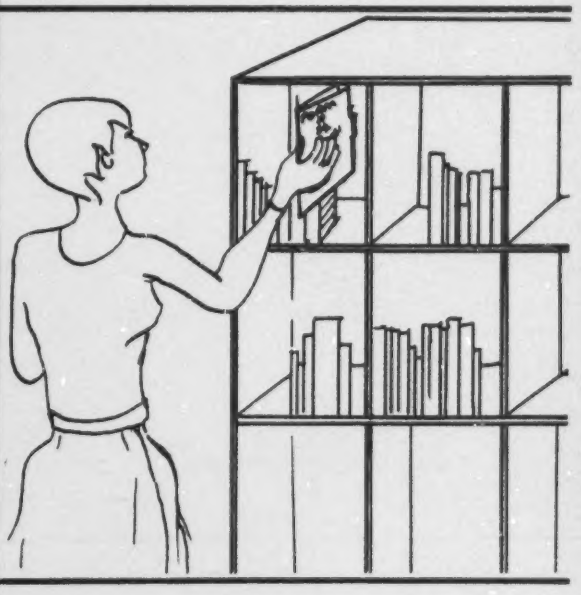
Æ, E, M,

line gauge

A line gauge refers to a special ruler or measuring device that printers use. It is usually one foot long, marked on one side with inches and on the other side with points.

live

Live refers to a "form" that is ready for printing. It also can be material that has been printed and is saved for future use.



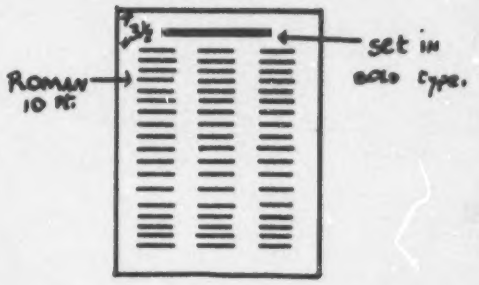
lower case

Lower case letters are those which are not capital letters.

abcde...

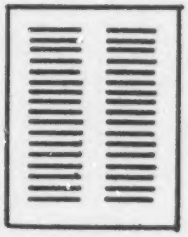
mark up

To mark up copy means to write instructions for the printer. These instructions, written on a layout, include width and depth of a page, style and size of type, size of illustration, and any other specific instructions that may apply.



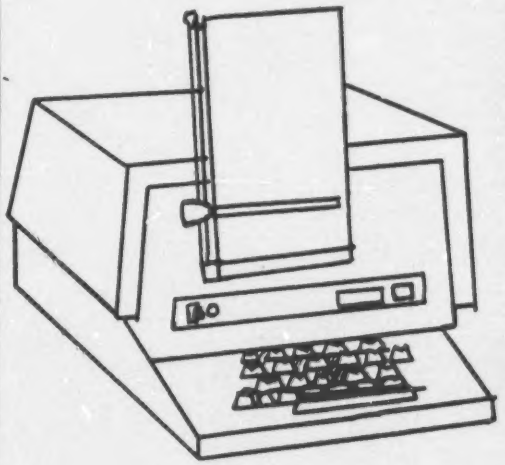
original (o rig i nal)

Original refers to the copy prepared by the customer. The final printing is made from the original.



phototypesetter (pho to type set ter)

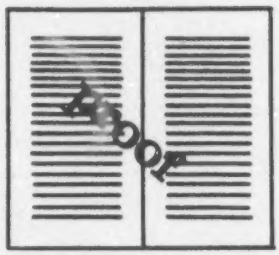
A phototypesetter is a machine that sets type by taking pictures. After the type has been set, the photographed material is fed into a developing unit which makes a film negative.



87

proof

A proof is a printed sample of the original copy. It may be metal, wood, film (negative or positive), and/or punched paper tape.

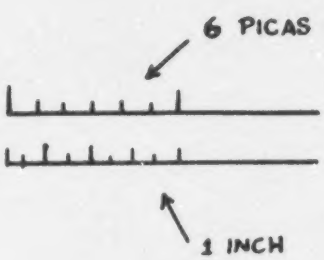


proofreading (proof read ing)

Proofreading means to read over the printed sample to see if there are any errors before final printing.

pica (pi ca)

Pica is the printer's basic unit of measure. A pica is equal to approximately 1/6 of an inch. Therefore 6 picas = one inch.

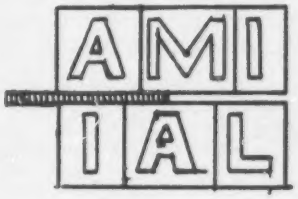


serif (ser if)

Serif is the short cross-line or finishing stroke which extends beyond the normal width of the type face.

slug

A slug is a strip of metal, 6 points or more, used for spacing between lines of type.



spacing (spac ing)

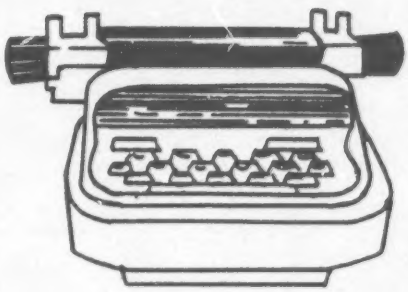
Spacing refers to setting print evenly.

GRAPHIC DESIGN

89

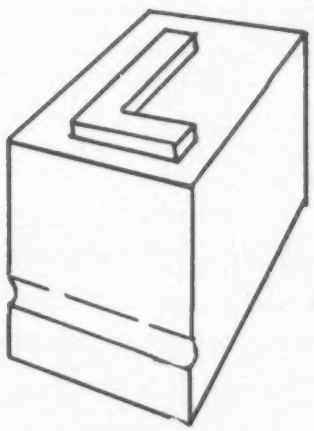
strike on

Strike on composition is type set by a direct-impression method or set on a typewriter composing machine. It is also known as cold type.



type high

Type high refers to the standard height of 0.918 inch for all type in the United States. It is measured from face to feet of type. This standard height makes it easier to adjust the pressure on various parts of a letterpress form.



type series

Type series is the same type face design, but it is different point sizes.

ABCDEFGH
ABCDEFGH
ABCDEFGH
ABCDEFGH

INDEX TO MODULES I-II

	Module	Lessons
ampersand	I	1
ascender	I	1
asterisk	I	1
body type	I	1
bold face	I	1
brayer	I	2
classification of type	I	2
cold type	I	2
composing stick	I	2
composition	I	2
comprehensive	II	10
compositor	I	3
computerized composition	I	3
copy	I	3
cropping	II	10
dead	I	3
descender	I	3
display type	I	4
dummy	II	10
em	I	4
en	I	4
family	I	4
flush left	I	4
flush right	I	5
folio	I	5
font	I	5
hairline	I	5
hot type	I	5
indention	II	10
justification	I	6
keyboard	I	6
layout	II	10
leading	I	6
letterspacing	I	6
ligature	I	6
line guage	I	7
live	I	7
lower case	I	7
margins	II	10
mark-up	I	7
	II	11

INDEX TO MODULES I-II (Cont'd)

opaquing		
original	I	7
overlay	II	11
paste up	II	11
phototypesetter	I	8
proof	I	8
proofreading	I	8
pica	I	8
register marks	II	11
reverse	II	11
rough layout	II	12
serif	I	8
slug	I	9
spacing	I	9
strike on	I	9
thumbnail sketch	II	12
type high	I	9
type series	I	9
type size	II	12
upper case	II	12